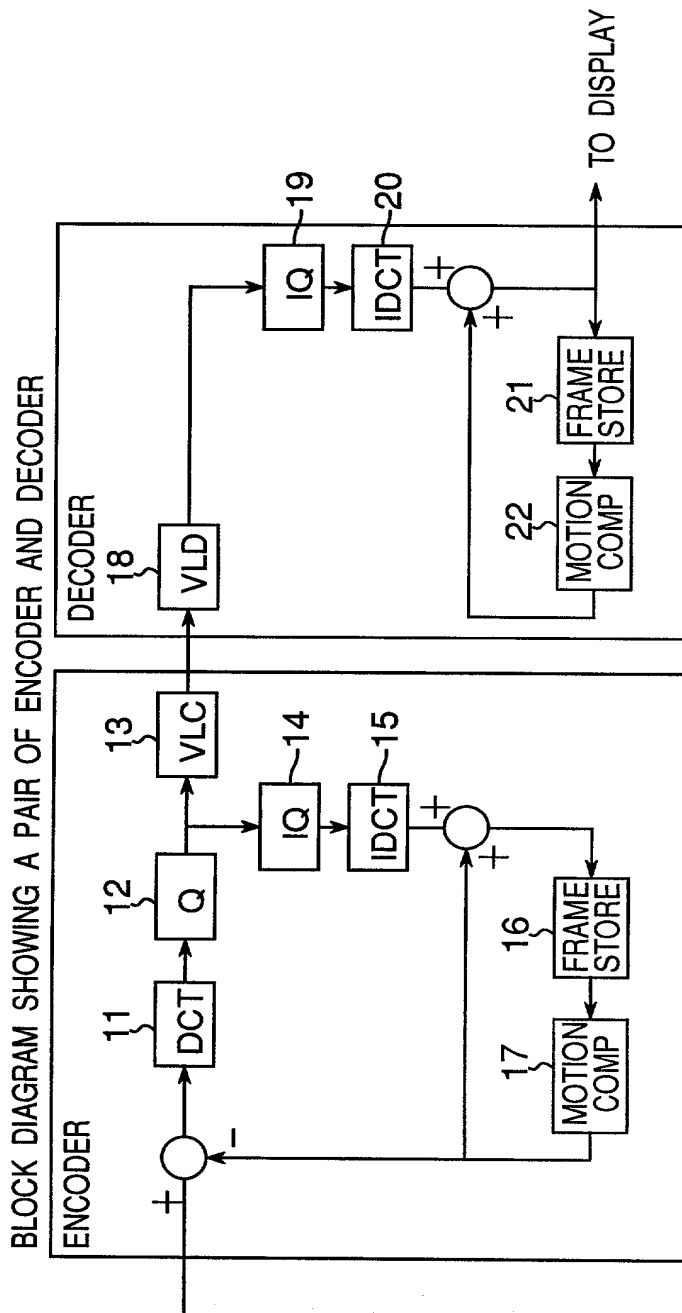


Fig.1

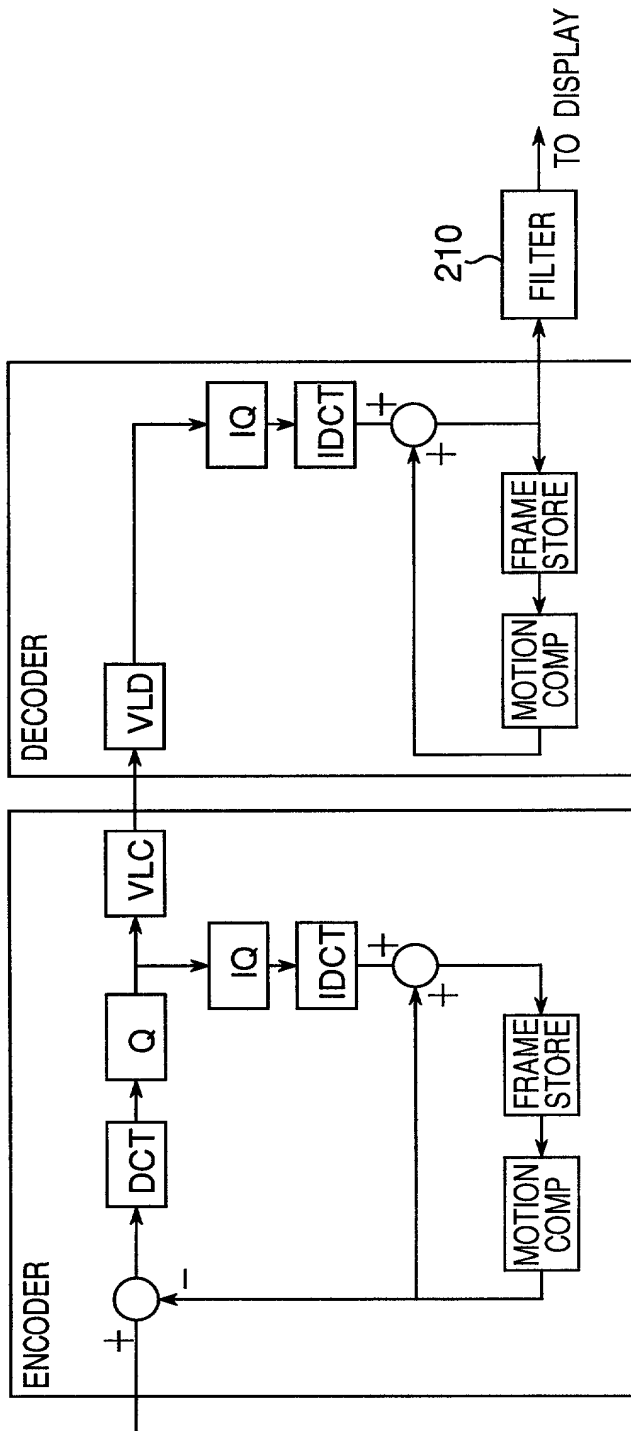


LEGEND :

- | | | | |
|-------------|--|------|-------------------------------------|
| DCT | - BLOCK BASED DISCRETE COSINE TRANSFORM | VLD | - VARIABLE LENGTH DECODING |
| Q | - QUANTIZATION | IQ | - INVERSE QUANTIZATION |
| VLC | - VARIABLE LENGTH CODING | IDCT | - INVERSE DISCRETE COSINE TRANSFORM |
| FRAME STORE | - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE | | |
| MOTION COMP | - MOTION COMPENSATION MODULE | | |

Fig.2

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER AS A POST FILTER FOR MOVING PICTURES.

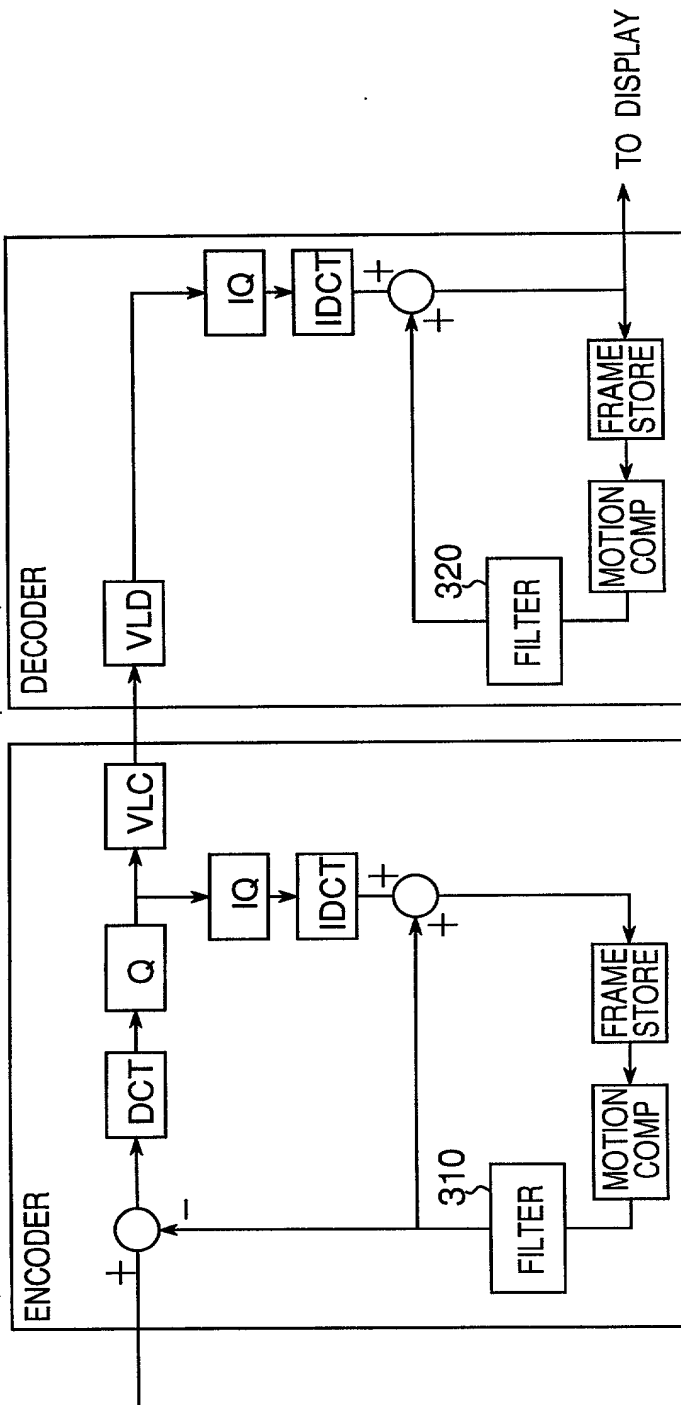


LEGEND:

- | | | | |
|-------------|--|--------|-------------------------------------|
| DCT | - BLOCK BASED DISCRETE COSINE TRANSFORM | VLD | - VARIABLE LENGTH DECODING |
| Q | - QUANTIZATION | IQ | - INVERSE QUANTIZATION |
| VLC | - VARIABLE LENGTH CODING | IDCT | - INVERSE DISCRETE COSINE TRANSFORM |
| FRAME STORE | - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE | FILTER | - BLOCKY NOISE REMOVAL |
| MOTION COMP | - MOTION COMPENSATION MODULE | | |

Fig.3

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER
AS A LOOP FILTER FOR MOVING PICTURES (CASE 1)



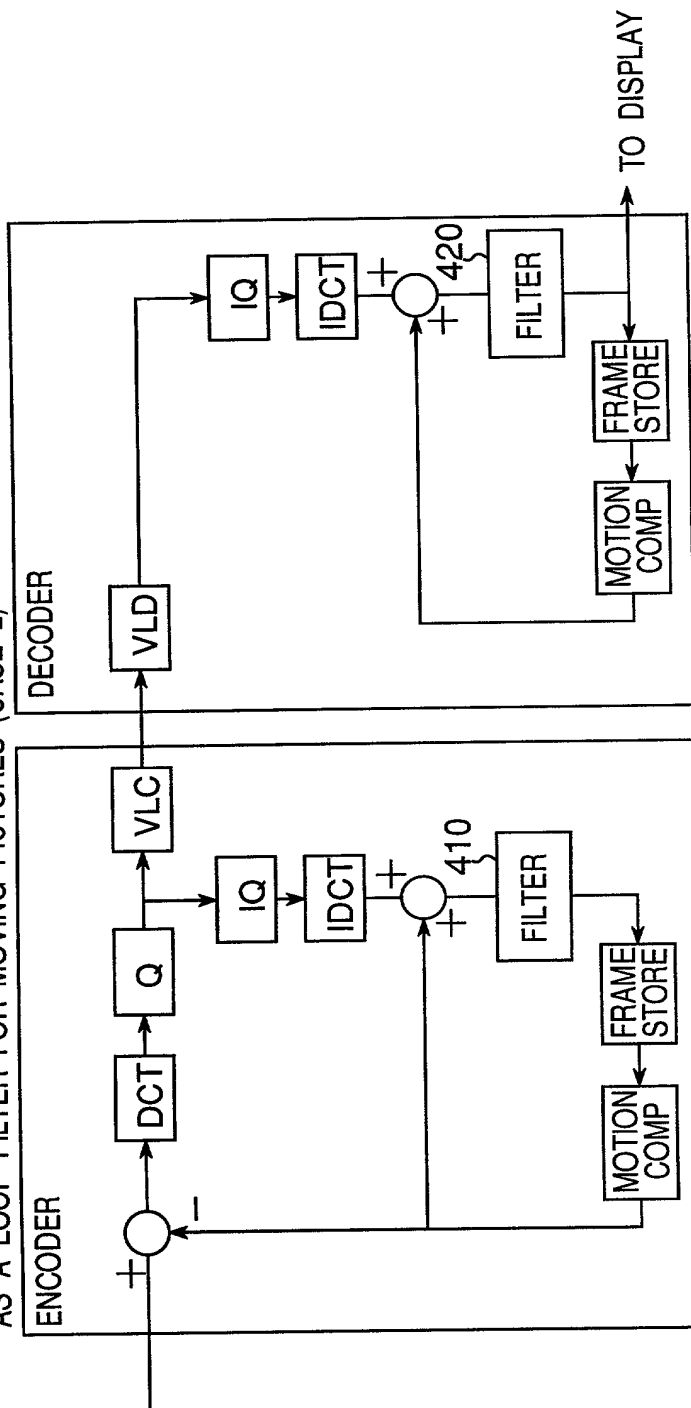
LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM
Q - QUANTIZATION
VLC - VARIABLE LENGTH CODING
FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE
MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING
IQ - INVERSE QUANTIZATION
IDCT - INVERSE DISCRETE COSINE TRANSFORM
FILTER - BLOCKY NOISE REMOVAL

Fig.4

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER
AS A LOOP FILTER FOR MOVING PICTURES (CASE 2)



LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM
Q - QUANTIZATION
VLC - VARIABLE LENGTH CODING
FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE
MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING
IQ - INVERSE QUANTIZATION
IDCT - INVERSE DISCRETE COSINE TRANSFORM
FILTER - BLOCKY NOISE REMOVAL

Fig.6

FLOWCHART FOR TWO-STATE
DYNAMIC SWITCHING DECISION

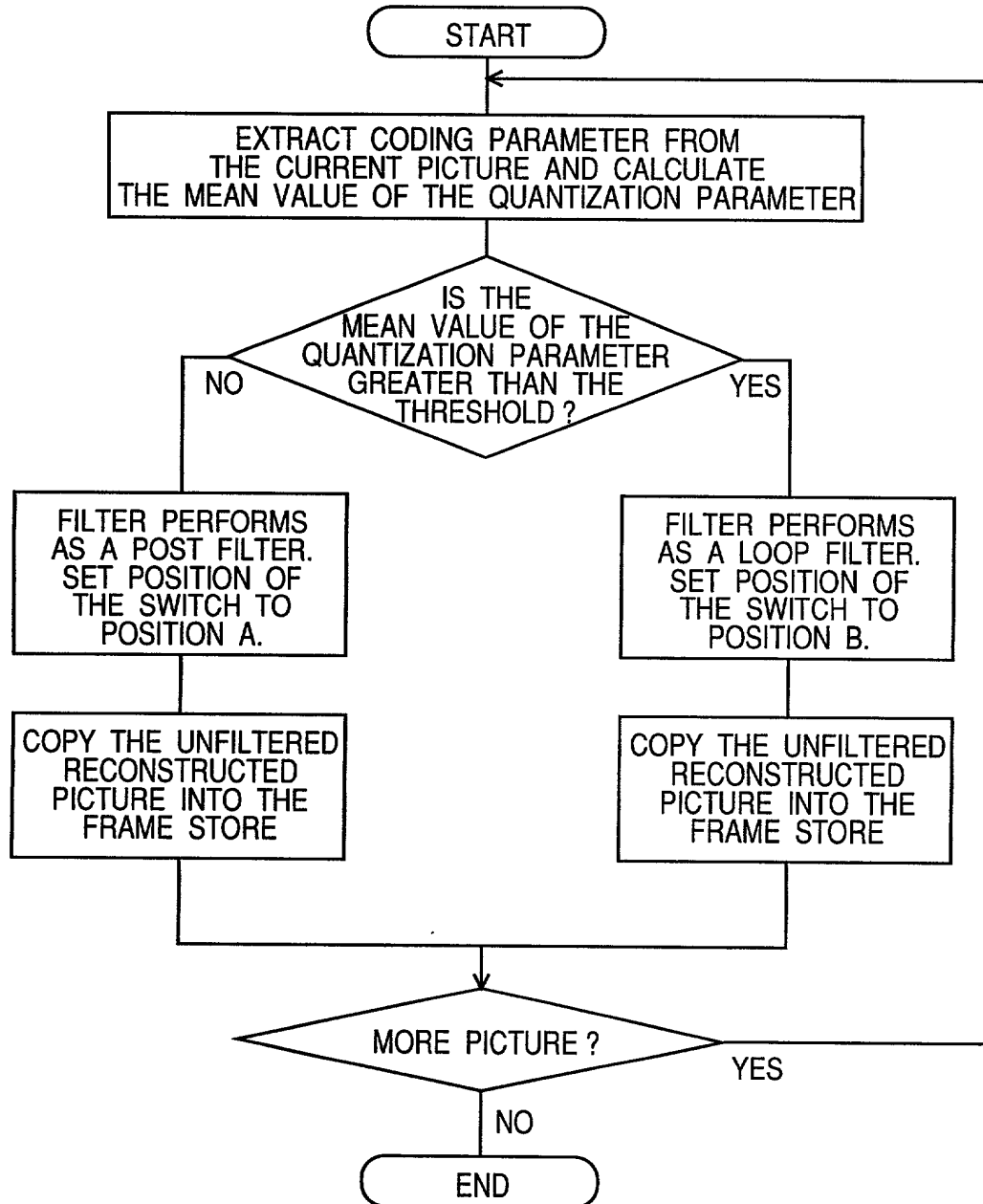
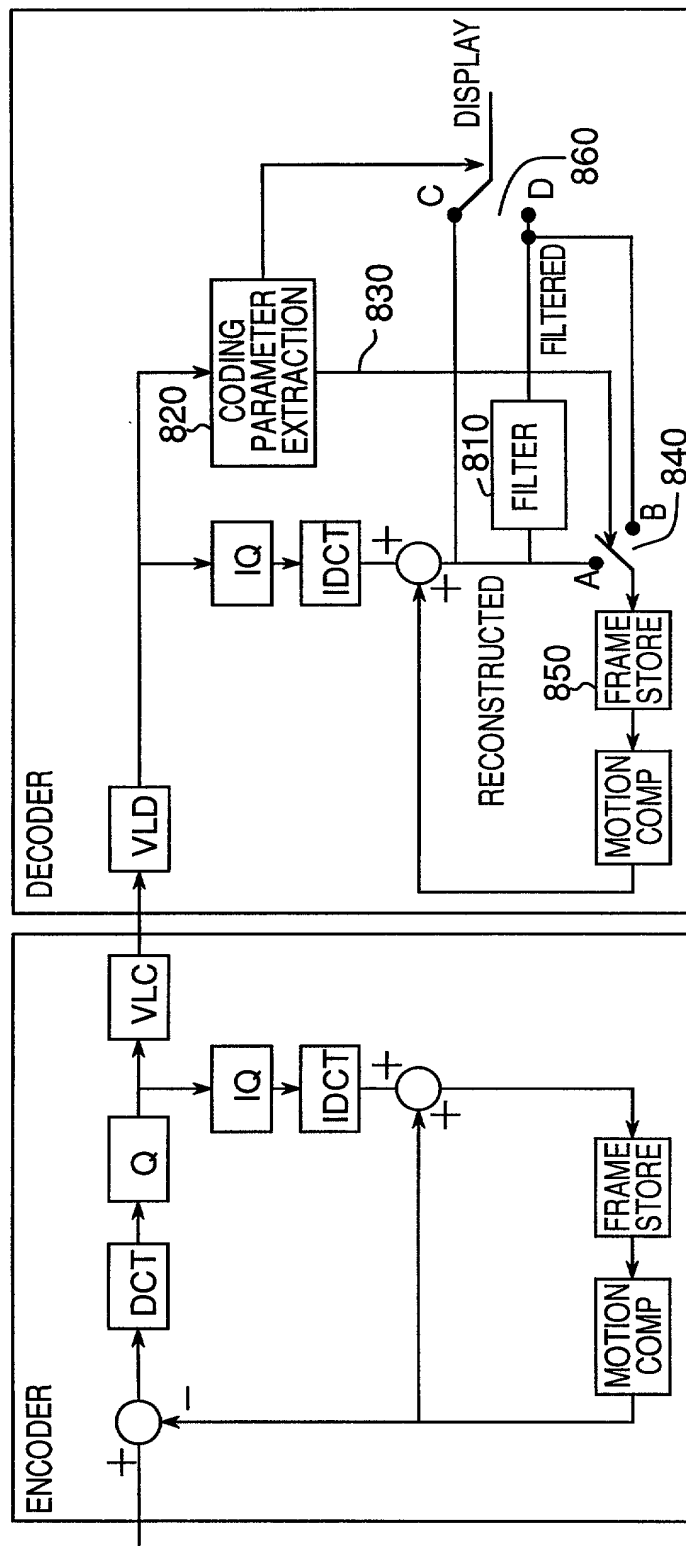


Fig. 8

BLOCK DIAGRAM SHOWING THE CURRENT INVENTION WITH DYNAMIC SWITCHING OF THE LOOP AND POST FILTER



LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

Q - QUANTIZATION

VLC - VARIABLE LENGTH CODING

FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING

INVERSE QUANTIZATION

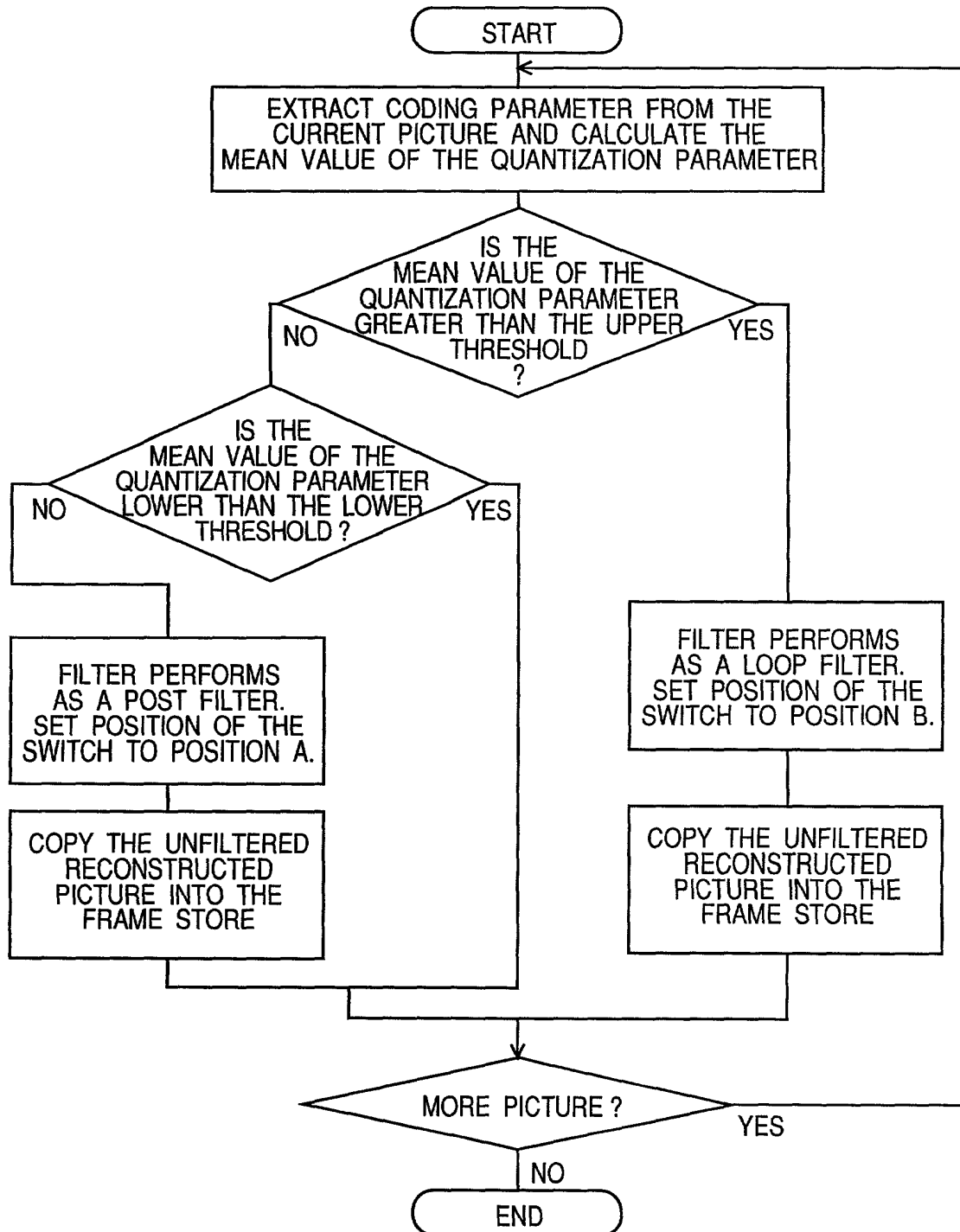
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FILTER - BLOCKY NOISE REMOVAL

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Fig.9

FLOWCHART FOR 3-STATE
DYNAMIC SWITCHING DECISION



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Fig.10

THE MOTION PREDICTION DIRECTION OF I-, P- AND B-PICTURES

